



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

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Ref: EPR-ER

INITIAL POLLUTION REPORT Vermiculite Intermountain Site Salt Lake City, Utah

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I. HEADING

Date: January 6, 2003
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To: Kevin Mould, EPA Headquarters
POLREP No.: Initial
Site: Vermiculite Intermountain Site

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II. BACKGROUND

Site Number: 08GA
Party Conducting the Action: EPA
Response Authority: CERCLA
CERCLIS No:
NPL Status: No
Action Memorandum Status: NA

III. SITE INFORMATION

A. Incident Category

Removal Evaluation

B. Site Description

1. Site description

This is one of many facilities that received vermiculite from a mine in Libby, Montana. The mine in Libby produced about 80% of the world's supply of vermiculite at one time and shipped vermiculite ore to various locations throughout the United States. The Libby vermiculite is co-mingled with amphibole asbestos of the tremolite-actinolite-richterite-winchite solution series and, as a result, there is asbestos contamination at many of the facilities which received vermiculite ore from the Libby mine.



The Vermiculite Intermountain facility received vermiculite ore in rail cars and "exfoliated" it, which means it was expanded in a furnace. The exfoliated vermiculite was sold as an insulation product, also known as "Zonolite." The original property boundaries apparently have changed and the former property is now divided among several entities, including Utah Power & Light, a commercial parking lot, and a storage unit business.

According to a business newspaper article found at the Historical Society, the facility was started up around 1940. The name was changed at some point to Intermountain Insulation. The business was moved in 1984 to 733 West 800 South. This new site is also undergoing a removal evaluation and is discussed in a separate polrep under the site name "Intermountain Insulation."

The property address was 333 West 100 South. No property has this address currently. During my initial site visit, I assumed that the exfoliation property was now occupied by the asphalt parking lot, which meant that the exfoliation property would have been capped. However, I was later contacted by a former employee from the exfoliation plant. He said the exfoliation building was located on an unpaved area next to an electrical substation, adjacent to the asphalt parking lot. He said the facility consisted of a building and railroad spur, both of which are now gone. The property is across the street from the Delta Center. This area of downtown Salt Lake City has undergone extensive renovation since the facility was in operation.

According to the former employee, the electrical substation was located next to the exfoliation plant when he worked there around the 1970s. The substation is owned by Utah Power & Light, a subsidiary of PacifiCorp.

The surrounding neighborhood is primarily commercial.

2. Physical location

The Site is located at 333 West 100 South in Salt Lake City, Utah.

2. Removal Site Evaluation and Site Characteristics

The original boundaries of the site have not yet been determined by EPA. However, a former employee has stated that the majority of the exfoliation building was on land currently owned by Utah Power & Light. This property contains an electrical substation and some vacant, unpaved land. Some gravel fill has been placed on the substation property. This substation property is fenced with a chain-link fence and the gates are locked. A property which abuts the substation property is currently occupied by an asphalt commercial parking lot. The parking lot is a few feet higher in elevation than the substation property, which suggests that fill might have been brought in. Another property which abuts the substation is occupied by buildings for a storage unit business.

EPA and its contractors conducted a sampling event on the substation property in October 2002. Visible vermiculite could be seen on the ground surface in several locations. As geoprobe core samples were obtained, visible vermiculite/asbestos waste material, known as "stoner rock" to some, could be seen in the cores. Samples of the vermiculite on the ground surface yielded percent levels of amphibole asbestos in some locations. Samples of the subsurface material also

yielded percent levels of asbestos in some locations.

The area where the former railroad spur was located could not be sampled with the geoprobe due to high voltage power lines buried in the subsurface.

EPA alerted Utah Power & Light and PacifiCorp representatives about the visible vermiculite on the ground surface and stoner rock in the subsurface. EPA learned that PacifiCorp hired a local asbestos firm in December 2002 to vacuum up vermiculite on the ground surface with a high-efficiency vacuum to address immediate exposure concerns to employees. EPA has not learned what concentrations of asbestos may remain on the ground surface following the vacuuming procedure, if any.

Percent levels of asbestos still exist in the subsurface, and asbestos may be present on the ground surface of the substation property. Based on these results, I anticipate that a removal action will be necessary at this site, including excavation or capping or a combination of the two. The next step will be to discuss these options with the property owner. Additional sampling may be necessary on other properties to determine the extent of contamination. It may not be possible to sample on the storage unit property since a building has been built where the exfoliation facility was located.

3. Description of threat

Asbestos is of concern because chronic inhalation exposure to excessive levels of asbestos fibers suspended in air can result in lung diseases such as asbestosis, mesothelioma, and lung cancer. Subacute exposures as short as a few days have been shown to cause mesothelioma. Asbestos is a hazardous substance as defined by 40 CFR Section 302.4 of the NCP.

3. State and Local Role

EPA has kept the Utah Department of Environmental Quality apprised of the sampling events and results. Neither the State nor local agencies have the resources to conduct the needed site investigations or clean-ups independently. The UDEQ has assisted EPA in many facets of the removal evaluation, most notably in locating the exfoliation facilities since no addresses were available at the beginning of the investigation.

B. Future Plans

EPA will conduct additional sampling to determine the extent of contamination.

C. Key Issues

None at this time.